

Teacher Manual

Other Factors Affecting the Sustainability Project

Review the worksheet with the students

What are some weeds that affect crop production in the Southern High Plains?

Possible answers to stimulate discussion:

Russian thistle

Pigweed

Kochia

Field bindweed

Foxtail

Cocklebur

Morning glory

Bring up other weeds that are common to the area that might not be listed in this list

As a possible homework or research assignment, have students research the effects of different weeds present in the area.

How do weeds negatively affect crop production in the Southern High Plains?

Possible answers to stimulate discussion:

Reduced yields

More water used

Reduced quality of crop

More fertilizer needed

What are some common plant diseases in the Southern High Plains?

Possible answers to stimulate discussion:

Wilt

Leaf spot

Blight

Bring up other crop diseases that are common to the area that might not be listed in this list.

Again as a possible assignment, have students research crop diseases.

How do plant diseases negatively affect crop production in the Southern High Plains?

Possible answers to stimulate discussion:

Reduced yields

Reduced crop quality

Loss of entire crop

Wasted resources

What are some common insects that are harmful to crops in the Southern High Plains?

Possible answers to stimulate discussion:

Boll Weevil

Beet army worm

Nematodes

Thrips

Grasshoppers

Bring up other insects that are common to the area that might not be listed in this list.

Again, as a possible assignment, have students research insects of the area.

How do insects negatively affect crop production in the Southern High Plains?

Possible answers to stimulate discussion:

Reduced yields

Reduced crop quality

Loss of entire crop

Costs of insecticides

Do you think the sustainable crop/livestock system will reduce the amount of harmful weeds, insects, and crop diseases?

Why or why not?

Possible answers to stimulate discussion:

The rotation of crops can interrupt pest cycles. The rotation of crops leads to healthier plants so they are stronger and can resist disease. The rotation of crops puts more organic matter into the soil so there will be more nutrients for the plants.